Figure 1. Sample 1: A - semi-coke; B- char with the onset of granular mosaic; C- coke particles with devolatilization vacuole; D – spinel; E – glass cenosphere. Reflected light, oil immersion.
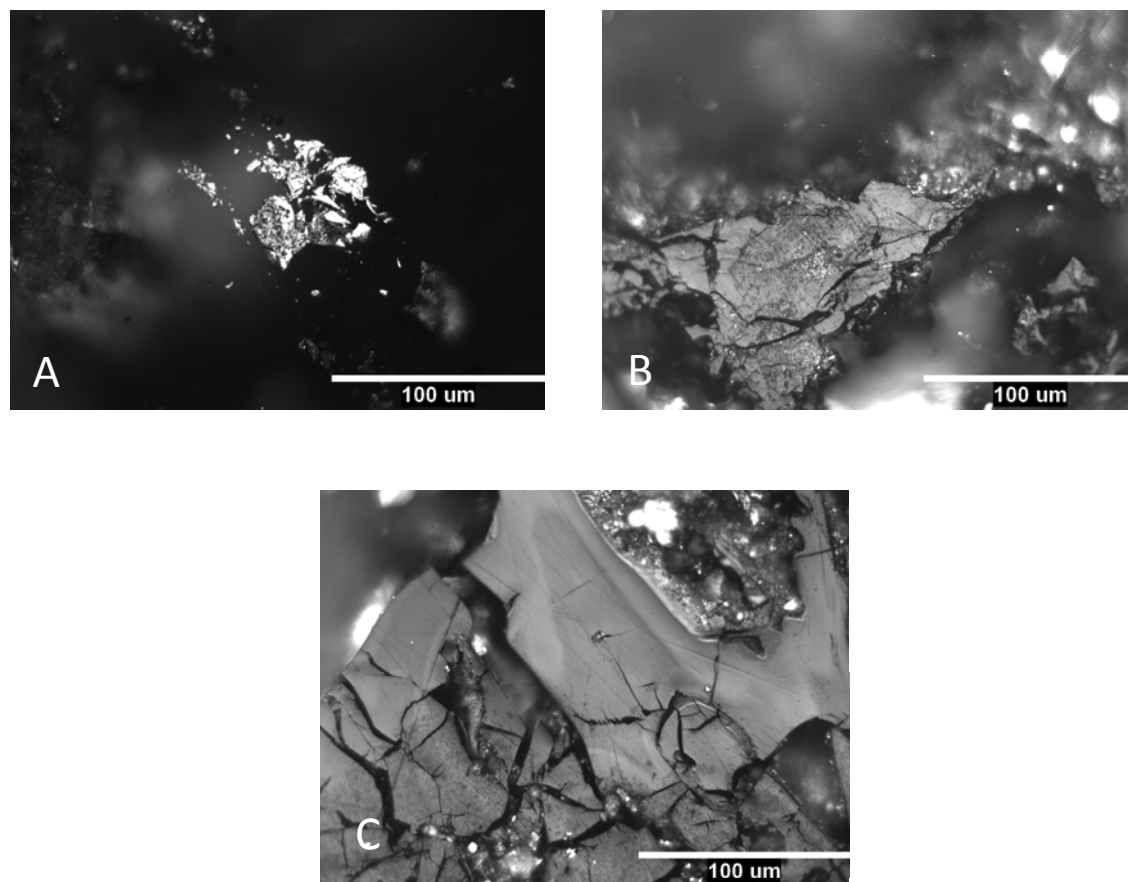
Figure 2. Sample 2: A – coke particle; B – Illinois Basin coal fragment; C- coal fragment. Reflected light, oil immersion.
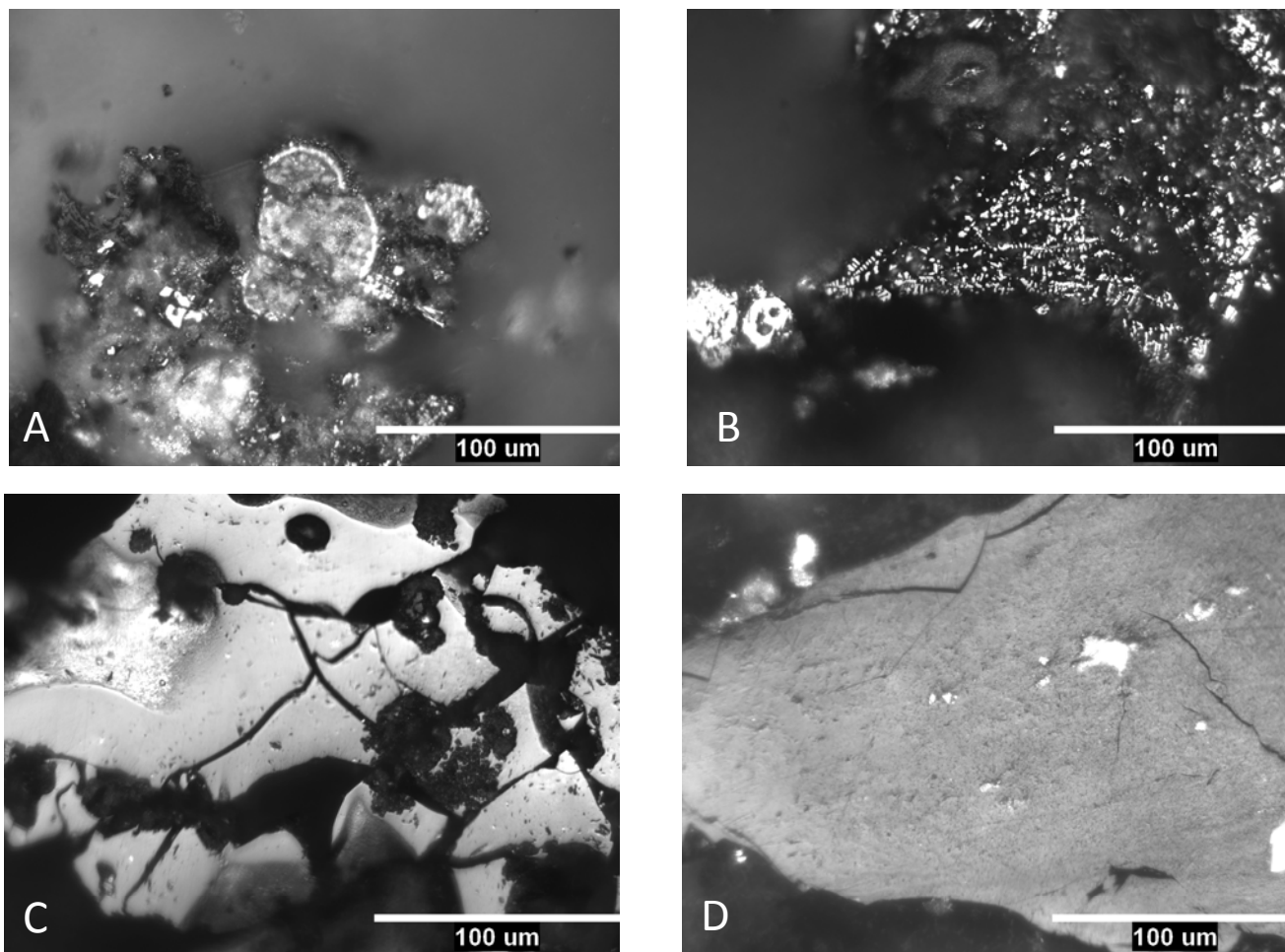
Figure 3. Sample 3: A – glass fly ash particle; B- spinel; C – isotropic char; D –Illinois Basin coal fragment. Reflected light, oil immersion.
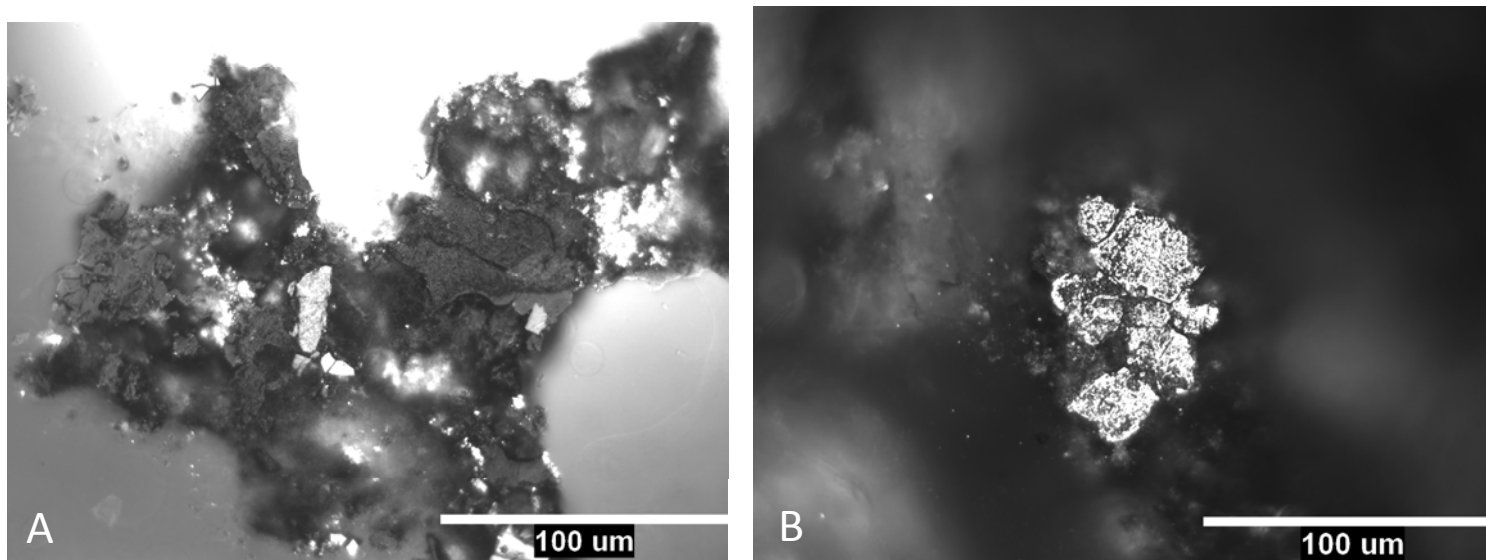
Figure 4. Sample 4 (A) : A –Illinois Basin coal fragment and sample 5 (B) spinel. Reflected light, oil immersion.